

AN ULTRA-VIOLET RADIATION CURABLE INK COMPOSITION AND A
PROCESS FOR ITS APPLICATION ON GLASS SUBSTRATES.

ABSTRACT

An ultraviolet radiation curable organic ink composition, comprising 80% to
5 95% by weight of an epoxy-polyurethane-based ink; 0.5% to 8% by weight of an
additive including a mixture of polyethylenic waxes and polytetrafluoroethylenic
waxes; 1% to 8% by weight of a blocked aliphatic polyisocyanate catalyst; and
an adhesion promoter primer including 0.15% to 3% by weight of a silane, which
can be directly included in the ultraviolet radiation curable organic ink
10 composition or independently applied to a substrate, in order that the blocked
aliphatic polyisocyanate catalyst promote a polymerization reaction and a
crosslinking reaction between the epoxy-polyurethane-based ink and the
adhesion promoter, when heated to 160 to 200°C, forming an interpenetration
network.

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